ZIEWNIC®
Solar Energy

Powered by
GROWATT PK (Pvt.) Ltd.



2022
CATALOGUE

Pakistan No.1 Selling Brand
IN SOLAR INVERTER & SOLAR PANEL.

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ZIEWNIC®
Solar Energy

About Us

The journey of the company has been initiated with the name of Growatt in 2014. Hardships of the company has successfully led them to develop their goodwill with the passage of time. Today's, the company is known as Growatt PK (Pvt) Ltd. The company is dealing with the solar panels and inverters to meet with the deficiencies of the production of electricity and promoting the idea of sustainable development of society.

Growatt PK solar panels and inverters approaches reliable products with the excellence and outstanding services. We suggest ideas as per the need of customers in order to meet global demands and challenges. The accessibility of quality product ranges from residential, commercial and industrial in order to meet the requirement level of consumer nationwide. The availability of products has vast range from lower to bigger level to satisfy the customer's wants and demands. The initiative step to flourish the economy with the idea of sustainable development and promote progress of the country with eco-friendly environment.

A long with quality products, teamwork coordination and collaboration is considering the backbone or powerful weapon to leads and earn the goodwill of company. The sincerity and devotion of the employees has rooted in the national market. Growatt PK's first priority is satisfying the customer needs with quality products and customized solution as per the requirement of the customer.

Our responsibility is not limited to the boundaries of selling products but earning the consumers' confidence by providing technically proficient and implementable solutions.

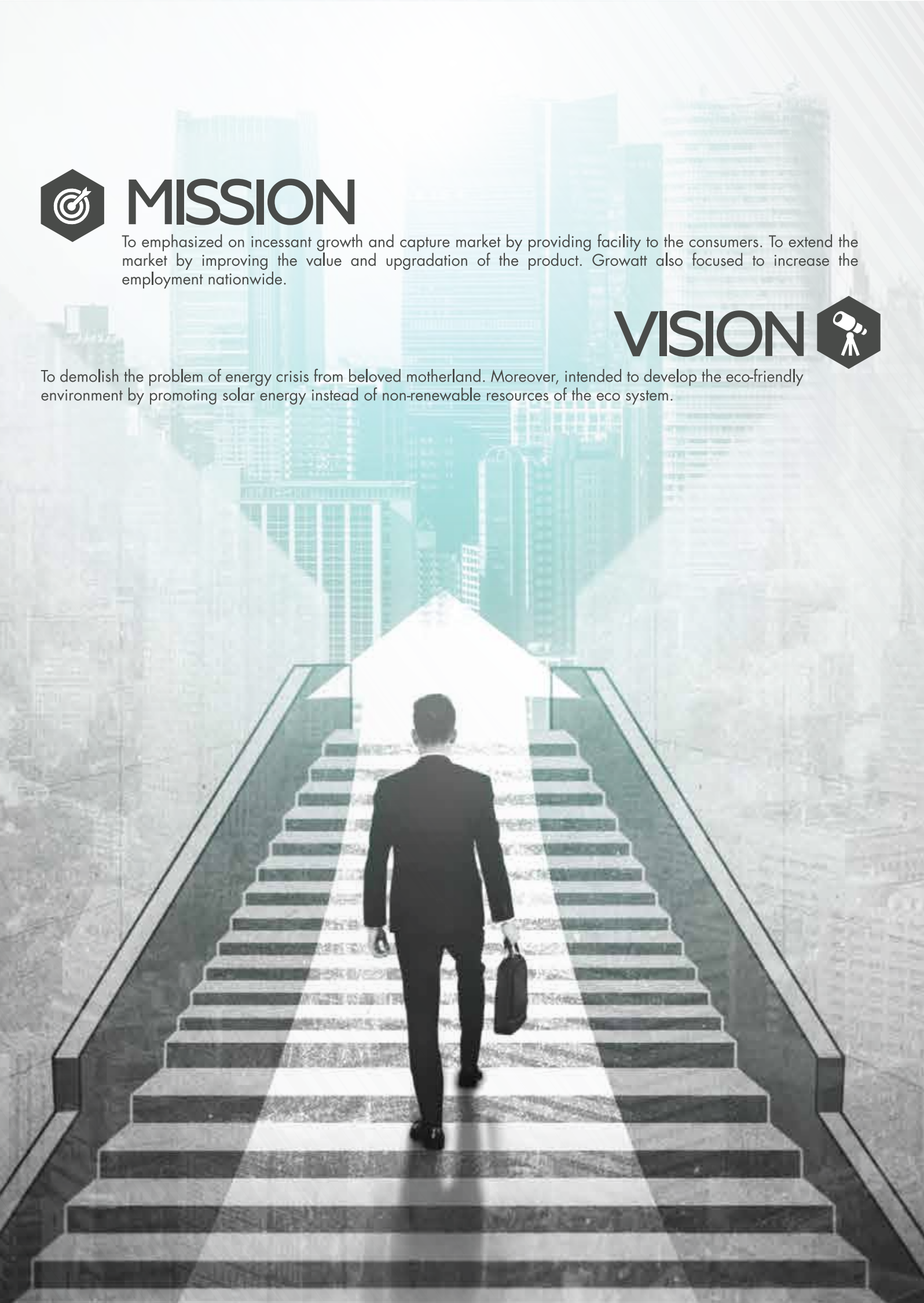
Growatt PK welcomes the prospective and potential customers to avail from our facilities. Feel free to contact us at any time.

MISSION

To emphasized on incessant growth and capture market by providing facility to the consumers. To extend the market by improving the value and upgradation of the product. Growatt also focused to increase the employment nationwide.

VISION

To demolish the problem of energy crisis from beloved motherland. Moreover, intended to develop the eco-friendly environment by promoting solar energy instead of non-renewable resources of the eco system.



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1.5/2.8 KVA

MARVEL HYBRID SERIES

SOLAR HYBRID INVERTERS

KEY SALIENT FEATURES

- Simulated sine wave 90%
- Built in solar charge controller 60AMP
- Battery equlization
- Hybrid settings functional with 3 buttons
- Boosted buck charging with (AVR)
- Voltage operate 95 volts 285 volts
- Reverse polarity protection
- Automatic Line-to-battery switch over
- Selectable input voltage ranges
- Rack design and wall-Mounted design for flexable installation
- Provides overload protection
- Auto restart while AC recoevry
- Multi-function LED/LCD indications and buzzer alarms
- High efficient DC-to-AC conversion minimizing energy loss
- Intelligent 4-stage charger for efficient charging and preventing overcharge
- Cost-effective as compare to generator multiple protection : Low battery alarm, Low battery shutdown, Over charge voltage shutdown, Overload alarm, Overload shutdown, Over temprature shutdown, Short circuit shutdown
- Conformal coating to prevent from dust and humidity

5 YEAR WARRANTY*

*Terms & Condition Applies

Certification

MARVEL SERIES

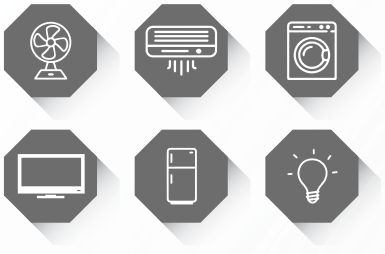
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MARVEL
SERIES

PRODUCT DATA SHEET

MODELS	MARVEL 1.5 KVA HYBRID	MARVEL 2.8 KVA HYBRID
Rated Power	1500VA / 1050W	2800VA / 1820W
INPUT		
Voltage	230 VAC	
Selectable Voltage Range	170-280 VAC (For Personal Computers) : 90-280 VAC (For Home Appliances)	
Frequency Range	50 Hz/60 Hz (Auto Sensing)	
OUTPUT		
AC Voltage Regulation (Batt.Mode)	230VAC+/- 5%	
Overload (Line mode)	Load > 110% +/- 15% Alarm 5 mins then fault if user decrease the load <100% rating, the overload alarm can release. Load >130% +/- 15% fault immediately	
Surge Power		
Efficiency(Peak)	90% ~ 93%	
Transfer Time	10 ms (for Personal Computers) : 20 ms (for Home Appliances)	
Wave form	Simulated Sine Wave	
BATTERY		
Battery Voltage	12 VDC	24 VDC
Floating Charge Voltage	13.5 VDC	27VDC
Overcharge Protection	16 VDC	31 VDC
SOLAR CHARGER & AC CHARGER		
Solar Charger Type	Semi MPPT	Semi MPPT
Maximum PV Array Open Circuit Voltage	55VDC	55VDC
Maximum PV Array Power	1000W	1500W
MPPT Range @ Operating Voltage	15-55 VDC	30-55 VDC
Maximum Solar Charge Current	60A	60 A
Maximum AC Charge Current	20A	20 A
Maximum Charge Current	80 A	80 A
ALARM		
PHYSICAL		
Dimension.D*W*H(mm)		
Net Weight (kgs)		
Communication Interface		
OPERATING ENVIRONMENT		
Humidity	5% to 95% Relative Humidity (Non-Condensing)	
Operating Temperature	-10°C to 50°C	
Storage Temperature	-15°C to 50°C	

Note: Product specifications are subject to change without further notice



ZIEWNIC®
Solar Energy

*1 Year Manufacturing Fault Warranty & 4 Year Service Warranty



6.0 KVA

ON/OFF GRID

ON GRID WITH ENERGY STORAGE SOLAR HYBRID INVERTER

KEY SALIENT FEATURES

- 1st inverter in Pakistan with Grid - tie and Self - consumption feature
- 100 % Pure Sine wave Inverter
- Upgraded 4th generation smart and intelligent solar inverter
- Zero transfer time
- Parallel up to 9 Units with optional Kit
- Efficiently Work without battery
- Upgraded MPPT based solar charge controller 8000Watts
- Integrated Wi-Fi interface with Android App
- Battery Equalization
- Data logging and Storage function
- Energy Prioritization according to the timer
- Conformal Coating to Prevent from Dust and Humidity
- Compatible with Li-ion , LifePo4 and etc.)
- Batteries with BMS
- TWO MPPT (140AH) based solar charge controller one for load two for torque load.
- Easy Replacement of fans.
- Energy prioritization according to the timer.
- Overload and Short Circuit Protection
- **European Design and Engineered in Taiwan**

5 YEAR WARRANTY*

*Terms & Condition Applies

Certification

Wi-Fi Stick (Optional)



REVO SERIES

Powered by **GROWATT PK**

REVO
SERIES

PRODUCT DATA SHEET

MODELS	ON/OFF GRID 6000/48
Rated Power	6000VA/5500W
INPUT	
Voltage	230VAC
Selectable Voltage Range	90-280VAC (For Home Appliances) / 170-280VAC (For Computer)
Frequency Range	50Hz/60Hz (Auto Sensing)
OUTPUT (OFF GRID OPERATION)	
AC Voltage Regulation (Batt.Mode)	230VAC±10%
Overload (Line mode)	5a @>150% load; 10s @110%-150% load; 100ms @>200% Load
Efficiency(Peak)	90%
Transfer Time	10ms (For Personal Computers); 20ms (For Home Appliances)
Wave form	Pure Sine Wave
OUTPUT (GRID-TIE OPERATION)	
Nominal Output Voltage	220/230/240 VAC
Output Voltage Range	184-264.5 VAC or 195.5 - 253 VAC (Selectable)
Nominal Output Current	26A
Power Factor	>0.99
BATTERY	
Battery Voltage	48VDC
Floating Charge Voltage	54VDC
Overcharge Protection	63VDC
SOLAR CHARGER & AC CHARGER	
Solar Charger Type	Two (MPPT) Parallel
Maximum PV Array Open Circuit Voltage	500VDC
Maximum PV Array Power	8000W 98%
MPPT Range @ Operating Voltage	120~450 VDC
Maximum Solar Charge Current	80A + 60A = 140A
Maximum AC Charge Current	60A
PHYSICAL	
Dimension.D*W*H(mm)	140 x 295 x 465mm
Net Weight (kgs)	12.2kg
Communication Interface	USB and Rs232
OPERATING ENVIRONMENT	
Humidity	0 to 90% Relative Humidity (Non-condensing)
Operating Temperature	-10°C to 50°C
Storage Temperature	-15°C to 60°C

Note: Product specifications are subject to change without further notice





ZIEWNIC®
Solar Energy

*1 Year Manufacturing Fault Warranty & 4 Year Service Warranty



3.2 KVA

VM II PLUS SERIES

SOLAR HYBRID INVERTER

KEY SALIENT FEATURES

- Introducing 1st time in Pakistan, Supporting 500W Plus solar panels in small size inverter
- 100% Pure Sine Wave Solar Inverter
- Built-in (80A) MPPT Solar Charge Controller
- Wi-Fi Optional - available for IOS/Android
- Built-in anit dust for harsh environment
- Smart battery charger design to optimize battery life
- Inverter running with battery
- Campatible with Li-ion, LifePo4 and etc
- High input voltage range (130~430VDC) for easy sharing with load
- Adaptable to main voltage/generator power
- Conformal coating to precent from Dust & Humidity
- **Design and Engineered in Taiwan**

5 YEAR WARRANTY*

*Terms & Condition Applies

- 500+ Watt Solar Support
- HIGH PV INPUT 130~430 VDC
- LITHIUM Battery Supported
- Wi-Fi Optional
- IP 21 Protection
- 80A MPPT Controller
- New LCD Design

Certification

VM II PLUS SERIES

Powered by **GROWATT PK**

VM II PLUS SERIES

PRODUCT DATA SHEET

MODELS	VM II PLUS 3200
Rated Power	3200VA
AC INPUT	230 VAC
Voltage	170~280 VAC (For Personal Computer)
Selectable Voltage Range	90~280VAC (For Home Appliances)
Frequency Range	50 HZ / 60 HZ (Auto Sensing)
AC OUTPUT	
AC Voltage Regulation	230 VAC + 5%
Surge Power	6000VA
Efficiency (Peak) PV to INV	97%
Efficiency (Peak) Battery to Inv	94%
Transfer Time	10 ms (For Personal Computers); 20 ms (For Home Appliances)
BATTERY & AC Charger	
Battery Voltage	24 VDC
Floating Charge Voltage	27 VDC
Overcharge Protection	33 VDC
Maximum AC Charge Current	60A
SOLAR CHARGER	
Maximum PV Array Power	4000W
MPPT Range @ Operating Voltage	130-430 VDC
Maximum PV Array Open Circuit Voltage	500 VDC
Maximum Charge Current	TRUE (MPPT) 80A
Maximum PV Input Current	18A
Maximum Efficieny	98%
PHYSICAL	
Communication Interface	RS323/GPRS/Wi-Fi
OPERATING ENVIRONMENT	
Humidity	5% to 95% Relative Humidity (Non~Condensing)
Operating Temperature	0°C~55°C
Storage Temperature	-15°C~60°C

Note: Product specifications are subject to change without further notice

Wi-Fi App



Wi-Fi Device Optional

ZIEWNIC® Solar Energy

*1 Year Manufacturing Fault Warranty & 4 Year Service Warranty



4.0/6.0 KW

VM IV SERIES

SOLAR HYBRID INVERTER

KEY SALIENT FEATURES

- 100% Pure sine wave inverter
- Inverter with battery equalization
- First time in PAKISTAN (100AH MPPT) based solar charge inverter
- Upgrated generaton smart and intelligent solar inverter
- Output power factor 1
- Adaptable to main voltage / Generator power
- Compatible with SNMP box Wi-Fi box
- New smart LCD display
- Conformal coating to prevent from dust and humidity
- Configurable AC/Solar input priority via LCD setting
- Overload and short circuit protection
- Work with battery and without battery
- Wi-Fi Mobile monitoring device (Optional)
- **Design and Engineered in Taiwan**

5 YEAR WARRANTY*

*Terms & Condition Applies



Wi-Fi Dongle

Wi-Fi App

Certification

U-CON SERIES

Powered by **GROWATT PK**

U-CON SERIES

PRODUCT DATA SHEET

MODELS	VM IV 4000-24	VM IV 6000-48
Rated Power	4000VA/4000W	6000VA/6000W
AC INPUT		
Voltage	230 VAC	
Selectable Voltage Range	170~280 VAC (For Personal Computer)	
Frequency Range	90~280VAC (For Home Appliances)	
AC OUTPUT	50 HZ / 60 HZ (Auto Sensing)	
AC Voltage Regulation	230 VAC ± 5%	
Surge Power	8000 VA	12000 VA
Efficiency (Peak) PV to INV	97%	
Efficiency (Peak) Battery to Inv	94%	
Transfer Time	10 ms (For Personal Computers); 20 ms (For Home Appliances)	
BATTERY & AC Charger		
Battery Voltage	24 VDC	48 VDC
Floating Charge Voltage	27 VDC	54 VDC
Overcharge Protection	33 VDC	63 VDC
Maximum AC Charge Current	60A	
SOLAR CHARGER		
Maximum PV Array Power	5000W	7000W
MPPT Range @ Operating Voltage	120~450 VDC	
Maximum PV Array Open Circuit Voltage	500 VDC	
Maximum Charge Current	**TRUE (MPPT) 100A**	
Maximum Efficieny	98%	
PHYSICAL		
Dimension.D*W*H(mm)	452*303*138	
Net Weight (kgs)	11.1	12.3
Communication Interface	Remove LCD /RS323/GPRS/Wi-Fi	
OPERATING ENVIRONMENT		
Humidity	5% to 95% Relative Humidity (Non~Condensing)	
Operating Temperature	0°C~55°C	
Storage Temperaturea	-15°C~60°C	

Note: Product specifications are subject to change without further notice

*1 Year Manufacturing Fault Warranty & 4 Year Service Warranty

ZIEWNIC® Solar Energy



1.5/3.0 KW

VM III PRO SERIES

SOLAR HYBRID INVERTER

KEY SALIENT FEATURES

- Introducing 1st time in Pakistan, Supporting 500W Plus solar panels in small size inverter
- 100% Pure Sine Wave Solar Inverter
- Built-in (100A) MPPT Solar Charge Controller
- Output power factor 1
- Wi-Fi Optional - available for IOS/Android
- Built-in anit dust for harsh environment
- Smart battery charger design to optimize battery life
- Inverter running with battery
- Campatible with Li-ion, LifePo4 and etc
- High input voltage range (80~500VDC) for easy sharing with load
- Battery equilization
- Adaptable to main voltage/generator power
- Conformal coating to precent from Dust & Humidity
- Built-in automatic electronics breaker for overload & short circuit protection.
- **Design and Engineered in Taiwan**

5 YEAR WARRANTY*

*Terms & Condition Applies

Certification

CE TÜV RoHS

500+ Watt Solar Support

HIGH PV INPUT 80~500VDC

LITHIUM Battery Support

Wi-Fi Optional

IP 21 Protection

100A MPPT Controller

New LCD Design

AXIM SERIES

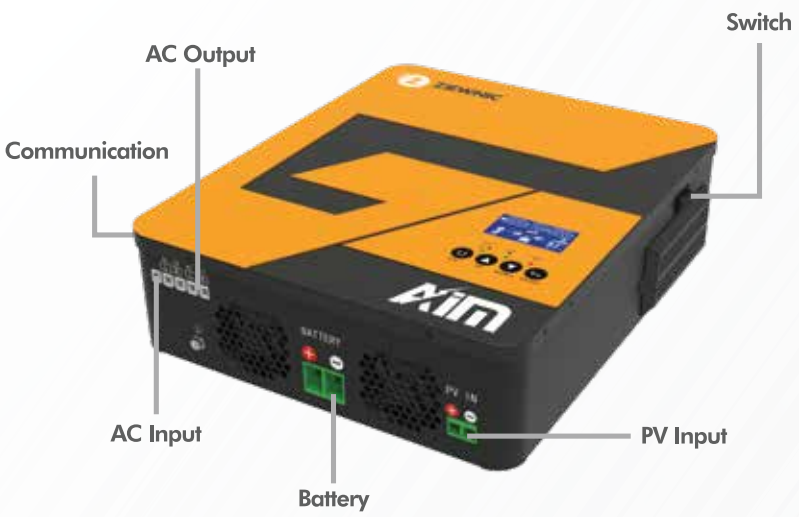
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AiM SERIES

PRODUCT DATA SHEET

MODELS	VM III PRO 1500-12	VM III PRO 3000-24
Rated Power	1500VA/1500W	3000VA/3000W
AC INPUT		
Voltage	230 VAC	
Selectable Voltage Range	170~280 VAC (For Personal Computer)	
Frequency Range	90~280VAC (For Home Appliances)	
AC OUTPUT	50 HZ / 60 HZ (Auto Sensing)	
AC Voltage Regulation	230 VAC + 5%	
Surge Power	2400 VA	6000 VA
Efficiency (Peak) PV to INV	97%	
Efficiency (Peak) Battery to Inv	94%	
Transfer Time	10 ms (For Personal Computers); 20 ms (For Home Appliances)	
BATTERY & AC Charger		
Battery Voltage	12 VDC	24 VDC
Floating Charge Voltage	13.5 VDC	27 VDC
Overcharge Protection	16 VDC	33 VDC
Maximum AC Charge Current	60A	
SOLAR CHARGER		
Maximum PV Array Power	2000W	4000W
MPPT Range @ Operating Voltage	80~430 VDC	80~430 VDC
Maximum PV Array Open Circuit Voltage	450 VDC	500 VDC
Startup PV Voltage / Nominal PV Voltage	150 VDC / 240 VDC	
Maximum Charge Current	TRUE (MPPT) 100A	
Maximum PV Input Current	18A	
Maximum Efficieny	98%	
PHYSICAL		
Dimension.D*W*H(mm)	423 x 368 x 172 mm	
Communication Interface	RS323/GPRS/Wi-Fi	
OPERATING ENVIRONMENT		
Humidity	5% to 95% Relative Humidity (Non~Condensing)	
Operating Temperature	0°C~55°C	
Storage Temperature	-15°C~60°C	

Note: Product specifications are subject to change without further notice





ZIEWNIC® Solar Energy

*1 Year Manufacturing Fault Warranty & 4 Year Service Warranty

4G
HYBRID INVERTER

120A True MPPT



4.0/6.0 KW

ON/OFF GRID 4G SOLAR HYBRID INVERTER

KEY SALIENT FEATURES

- Introducing 1st time in Pakistan, Supporting 600w plus solar panels
- 100% Pure Sine Wave Solar Inverter
- Output power factor 1.0
- Optional Wi-Fi available for IOS/Android devices
- Inverter running with battery or without battery
- MPPT Based Solar Charge Controller (120A)
- New LCD function design with touch buttons
- High PV input voltage range (120~500 VDC) for easy sharing with load
- Built-in anti dust for harsh environment
- Battery equilization / lithium battery supported
- Adaptable to main Voltage / generator power
- Conformal coating to prevent from dust and humidity
- Built-in automatic electronic breaker for overload & short circuit protection
- **Designed and Engineered in Taiwan**

5 YEAR WARRANTY*

*Terms & Condition Applies

Wi-Fi App

RGB Customized Status Lighting

600w Plus Solar Panels Supported

On/Off Grid Technology

Optional Wi-Fi

IP 21 Protection

Maximum Efficiency 98%

New LCD Design

Work Without Battery

Certification

AiM SERIES

Powered by GROWATT PK

AiM SERIES

PRODUCT DATA SHEET

MODELS	4G 4000-24	4G 6000-48
PHASE	1-Phase in / 1-phase out	
MAXIMUM PV INPUT POWER	5000W	7000W
RATED OUTPUT POWER	4000W	6000W
MAXIMUM CHARGING POWER	3880W	5800W
GRID-TIE OPERATION WITHOUT BATTERY		
PV INPUT (DC)		
Nominal DC Voltage Maximum DC Voltage	240 VDC / 500 VDC	
Start - up Voltage / Initial Feeding Voltage	120 VDC /180VDC	
MPP Voltage Range	120 VDC~ 450 VDC	
Number of MPP Trackers / Maximum Input Current	1 x 18 A	1 x 27 A
GRID OUTPUT (AC)		
Nominal Output Voltage	220/230/240 VAC	
Output Voltage Range	220-230	
Nominal Output Current	18.1 A	27.2 A
Power Factor	1.0	
EFFICIENCY		
Maximum Conversion Efficiency (DC / AC)	95%	
European Efficiency@ Vnominal	96%	
OFF - GRID OPERATION WITH BATTERY		
AC INPUT		
AC Start - up Voltage / Auto Restart Voltage	90-140 VAC / 180 VAC	
Acceptable Input Voltage Range	170 - 280 VAC	
Maximum AC Input Current	60A	60A
PV INPUT (DC)		
Maximum DC Voltage	500 VDC	
MPP Voltage Range	120 ~ 450 VDC	
Number of MPP Trackers Maximum Input Current	1 x 18 A	1 x 27 A
Rated Current MPPT	120A	
BATTERY MODE OUTPUT (AC)		
Nominal Output Voltage	220/230/240 VAC	
Output Waveform	Pure Sinewave	
Emolency (DC to AC)	93%	
HYBRID OPERATION		
PV INPUT (DC)		
Nominal DC Voltage / Maximum DC Voltage	240 VDC / 500 VDC	
Start - up Voltige / Intial Feeding Voltage	120 VDC / 180 VDC	
MPP Voltage Range	120 VDC ~ 450 VDC	
Number of MPP Trackers/Maximum Input Current	1 x 18 A	1 x 27 A
GRID OUTPUT (AC)		
Nominal Output Voltage	220/230/240 VAC	
Output Voltage Range	220/230 VAC	
Nominal Output Current	18.1 A	27.2 A
AC INPUT		
AC Start - up Voltage / Auto Restart Voltage	90 -140 VAC	
Acceptable Input Voltage Range	170 - 280 VAC	
Maximum AC Input Current	20.2 A	29.2 A
BATTERY MODE OUTPUT (AC)		
Nominal Output Voltage	220/230/240 VAC	
Efficiency (DC to AC)	93%	
BATTERY & CHARGER		
Nominal DC Voltage	24 V	48 V
Maximum Charging Current	60/30 A Default Adjustable	
GENERAL		
PHYSICAL		
Dimension , D x W x H (mm)	540 x 420 x 205 mm	
INTERFACE		
Communication Port	com-Rs-232/USB	
ENVIRONMENT		
Humidity	0~90% RS (Non-Condensing)	
Operating Temperature	-10 to 50°C	
Altitude	0 ~ 1000 m**	

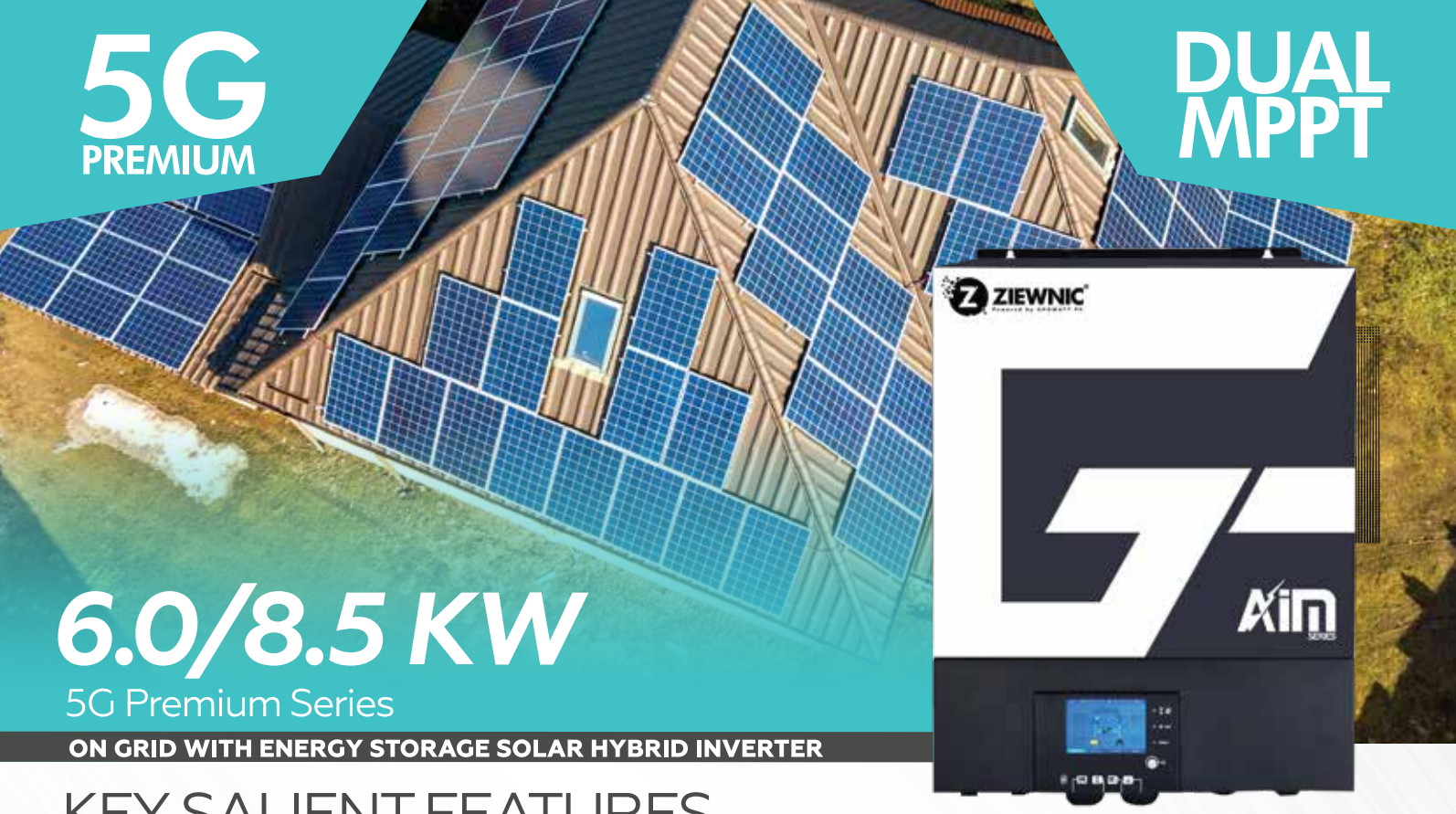
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ZIEWNIC® Solar Energy

*1 Year Manufacturing Fault Warranty & 4 Year Service Warranty

5G
PREMIUM

DUAL
MPPT



6.0/8.5 KW

5G Premium Series

ON GRID WITH ENERGY STORAGE SOLAR HYBRID INVERTER

KEY SALIENT FEATURES

- **Introducing 1st time in Pakistan, single phase inverters support three phase when installed in parallel**
- 100 % Pure Sine wave Inverter
- Detachable touch screen control module with various communications
- PV and utility power the load at the same time (can be set)
- Output power factor PF=1.0
- Energy generated record, load record, history information and fault record
- Support Peak-Valley Charge
- Parallel operation up to 9 units
- Built-in two 5000W MPPTs, with wide input range: 120~450VDC
- Reserved communication ports (RS232,RS485,CAN)
- Upgraded 5th generation smart and intelligent solar inverter
- Zero transfer time
- Efficiently Work with & with out battery
- Optional Wi-Fi interface with Android & IOS
- Battery Equalization/Compatible with Li-ion , LifePo4 and etc.)
- Conformal Coating to Prevent from Dust and Humidity
- Easy Replacement of fans.
- Overload and Short Circuit Protection
- **European Design and Engineered in Taiwan**

*Terms & Condition Applies



- A Removable screen port
- B Generator dry contactor
- C USB
- D For BMS (Rs485 or CAN)
- E Rs232
- F PV Input 1 and PV Input 2
- G AC Input
- H AC output
- I Parallel port
- J Battery Input
- K WIFI port



Aim SERIES

Powered by **GROWATT PK**

AIM SERIES

PRODUCT DATA SHEET

MODELS	5G PREMIUM 6000-48	5G PREMIUM 8500-48
MODEL	6000VA/6000W	8500VA/8500W
Rated Power		
INPUT		
Voltage	230 VAC	
Selectable Voltage Range	170-280 VAC (For Personal Computers); 90-280 VAC (For Home Appliances)	
Frequency Range	50Hz/60Hz (Auto Sensing	
OUTPUT		
AC Voltage Regulation (Batt . Mode)	230VAC +/- 5%	
Surge Power	11000 VA	16000VA
Efficiency (Peak)	upto 96.5%	
Transfer Time,	10ms (For Personal Computers); 20ms (For Home Appliances)	
Waveform	Pure Sine Wave	
BATTERY		
Battery Voltage	48VDC	
Floating Charge Voltage	54 VDC	
Overcharge Protection	63 VDC	
SOLAR CHARGER & AC CHARGER		
Maximum PV Array Open Circuit Voltage	500VDC	
Maximum PV Array Power	5000W X2	
MPPT Range @ Operating Voltage	120~450 VDC	
Maximum Solar Charge Current	100A	160A
Maximum AC Charge Current	80A	120A
Maximum Charge Current	100A	160A
PHYSICAL		
Dimension , D x W x H (mm)	500x302x147.5	420x561.6x152.4
Net Weight (kgs)	18	21
Communication Interface	USB/Rs232	
ENVIRONMENT		
Humidity	5% to 95% Relative Humidity (Non~Condensing)	
Operating Temperature	-10°C~55°C	
Storage Temperature	-15°C~60°Ca	

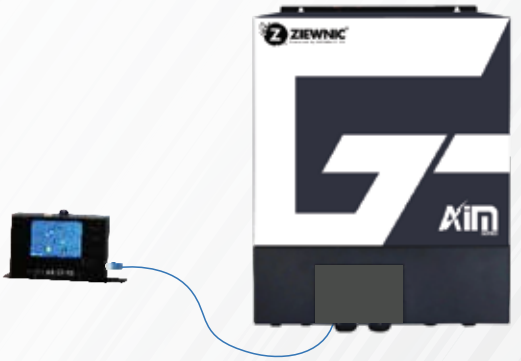
Note: Product specifications are subject to change without further notice



Wi-Fi Communication (Optional)



Detachable Touch Screen



*1 Year Manufacturing Fault Warranty & 4 Year Service Warranty

ZIEWNIC® Solar Energy

Introducing 1st Time in Pakistan
Real 5th GEN Inverter With
GOLD CASING

140A
TRUE MPPT



4.5/6.5 KW
PV 5500 / PV 8000
SOLAR HYBRID INVERTER

KEY SALIENT FEATURES

- **Introducing 1st Time In Pakistan Real 5th Gen Inverter, Supporting 800w Plus Solar Panels**
- 100% Pure Sine Wave Solar Inverter
- Output power factor 1.0
- Optional Wi-Fi available for IOS/Android devices
- Inverter running with battery or without battery
- 1 button restore setting options in program (00)
- Battery equilizations in program (30)
- Record fault code feature in program (25)
- Adaptable to main Voltage / generator power
- Conformal coating to prevent from dust and humidity
- Built-in automatic electronics breaker for overload & short circuit protection
- New Color Screen LCD function design with touch buttons
- Built-in anti dust for harsh environment
- Compatible with all kinds of Lithium Batteries
- **98% Real time sharing**
- **Overload Protection on 120% Load**
- **Surge Capacity 2* Rated Power for 5 Seconds**
- **Battery charging current upto 180A**
- **MPPT Based Solar Charge Controller (140A)**
- **High PV input voltage range (90~550 VDC)**
- **12V DC Output 32A**
- **Maximum PV input current 20A/32A**
- **Multiple operation modes (On Grid / Of Grid / Hybrid)**
- **Grid-Tied net metering feature with 100% reverse grid feeding**
- **Builtin Zero export**
- **Designed and Engineered in Taiwan**



*Terms & Condition Applies

NEW COLOR SCREEN
LCD WITH TOUCH BUTTONS





Certification

Wi-Fi App



Wi-Fi Dongle

5TH PREMIUM GOLD SERIES

Powered by **GROWATT PK**

5TH 5g PREMIUM GOLD SERIES

PRODUCT DATA SHEET

MODELS	5G GOLD PREMIUM 5500PV	5G GOLD PREMIUM 8000PV
PHASE	1-Phase in/ 1-Phase out	
MAXIMUM PV INPUT POWER	5500W	8000W
RATED OUTPUT POWER	4500W	6500W
MAXIMUM CHARGING POWER	4350W	6350W
GRID-TIE OPERATION		
PV INPUT (DC)		
Nominal DC Voltage / Maximum DC Voltage	360 VDC / 550 VDC	
Start - up Voltage / Initial Feeding Voltage	120 VDC / 240 VDC	
MPP Voltage Range	90 VDC ~ 455 VDC	
Number of MPP Trackers / Maximum Input Current	1 x 20A	1 x 32A
Feed-in Grid Voltage Range	195 ~ 253 VAC	
Feed-in Grid Frequence Range	49 ~ 51 ± 1Hz	
GRID OUTPUT (AC)		
Nominal Output Voltage	220/230/240 VAC	
Output Voltage Range	220-230	
Nominal Output Current	20.45A	29.54A
Power Factor	1.0	
EFFICIENCY		
Maximum Conversion Efficiency (DC / AC)	97%	
European Efficiency@ Vnominal	98%	
OFF - GRID OPERATION WITH BATTERY		
AC INPUT		
AC Start - up Voltage / Auto Restart Voltage	90-140 VAC / 180 VAC	
Acceptable Input Voltage Range	170 - 280 VAC	
Maximum AC Input Current	60A	60A
PV INPUT (DC)		
Maximum DC Voltage	550 VDC	
MPP Voltage Range	90 ~ 455 VDC	
Number of MPP Trackers Maximum Input Current	1 x 20A	1 x 32A
Rated Current MPPT	140 A	
BATTERY MODE OUTPUT (AC)		
Nominal Output Voltage	220/230/240 VAC	
Output Waveform	Pure Sinewave	
Emolency (DC to AC)	93%	
HYBRID OPERATION		
PV INPUT (DC)		
Nominal DC Voltage / Maximum DC Voltage	360 VDC / 550 VDC	
Start - up Voltage / Intial Feeding Voltage	120 VDC / 240 VDC	
MPP Voltage Range	90 VDC ~ 455 VDC	
Number of MPP Trackers/Maximum Input Current	1 x 20A	1 x 32A
GRID OUTPUT (AC)		
Nominal Output Voltage	220/230/240 VAC	
Output Voltage Range	220-230	
Nominal Output Current	20.45A	29.54A
AC INPUT		
AC Start - up Voltage / Auto Restart Voltage	90 - 140 VAC	
Acceptable Input Voltage Range	170 - 280 VAC	
Maximum AC Input Current	24.45A	33.54A
BATTERY MODE OUTPUT (AC)		
Nominal Output Voltage	220/230/240 VAC	
Efficiency (DC to AC)	93%	
BATTERY & CHARGER		
Nominal DC Voltage	24V	48V
Maximum Charging Current	60/30 A Default Adjustment	
No Load Power Consumption	35W	62W
GENERAL		
PHYSICAL		
Dimension , D x W x H (mm)	540 x 440 x 205 mm	
INTERFACE		
Communication Port	com-Rs-232/USB	
ENVIRONMENT		
Humidity	0~90% RS (Non-Comdending)	
Operating Temperature	-10 to 50 Degree	
Altitude	0 ~ 1000 m**	

Note: Product specifications are subject to change without further notice

ZIEWNIC® Solar Energy

*1 Year Manufacturing Fault Warranty & 4 Year Service Warranty

1st Off Grid Inverter
With Real Time Sharing

120A TRUE MPPT



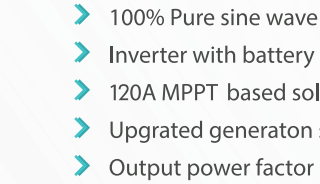
4.0/6.0 KW

VM IV - PV5000 / PV7000

OFF GRID SOLAR INVERTER

KEY SALIENT FEATURES

- 100% Pure sine wave inverter
- Inverter with battery equalization
- 120A MPPT based solar charge inverter
- Upgrated generaton smart and intelligent solar inverter
- Output power factor 1
- Adaptable to main voltage / Generator power
- Compatible with SNMP box Wi-Fi box
- New smart LCD display
- Conformal coating to prevent from dust and humidity
- Configurable AC/Solar input priority via LCD setting
- Overload and short circuit protection
- Work with battery and without battery
- Wi-Fi Mobile monitoring device (Optional)
- **Design and Engineered in Taiwan**



*Terms & Condition Applies



Wi-Fi Dongle

Wi-Fi App

Certification

MARVEL SERIES

Powered by **GROWATT PK**

MARVEL SERIES

PRODUCT DATA SHEET

MODELS	MARVEL VM IV 5000PV	MARVEL VM IV 7000PV
Rated Power	4000VA/4000W	6000VA/6000W
AC INPUT		
Voltage	230 VAC	
Selectable Voltage Range	170~280 VAC (For Personal Computer)	
Frequency Range	90~280VAC (For Home Appliances)	
AC OUTPUT	50 HZ / 60 HZ (Auto Sensing)	
AC Voltage Regulation	230 VAC ± 5%	
Surge Power	8000 VA	12000 VA
Efficiency (Peak) PV to INV	97%	
Efficiency (Peak) Battery to Inv	94%	
Transfer Time	10 ms (For Personal Computers); 20 ms (For Home Appliances)	
BATTERY & AC Charger		
Battery Voltage	24 VDC	48 VDC
Floating Charge Voltage	27 VDC	54 VDC
Overcharge Protection	33 VDC	63 VDC
Maximum AC Charge Current	60A	
SOLAR CHARGER		
Maximum PV Array Power	5000W	7000W
MPPT Range @ Operating Voltage	120~450 VDC	
Maximum PV Array Open Circuit Voltage	500 VDC	
Maximum Charge Current	**TRUE (MPPT) 120 A**	
Maximum Efficieny	98%	
PHYSICAL		
Dimension.D*W*H(mm)	543 x 394 x 214 mm	
Net Weight (kgs)	11.1	12.3
Communication Interface	Remove LCD /RS323/GPRS/Wi-Fi	
OPERATING ENVIRONMENT		
Humidity	5% to 95% Relative Humidity (Non~Condensing)	
Operating Temperature	0°C~55°C	
Storage Temperaturea	-15°C~60°C	

Note: Product specifications are subject to change without further notice

*1 Year Manufacturing Fault Warranty & 4 Year Service Warranty

ZIEWNIC® Solar Energy

1st Inverter With
EUROPEAN BASED SOLAR HYBRID INVERTER

160A
DUAL MPPT
(Parallel Based)



7.0 KVA

MARVEL 5G EUROPEAN - PV 8500

ON GRID WITH ENERGY STORAGE SOLAR HYBRID INVERTER

KEY SALIENT FEATURES

- **Introducing 1st Time In Pakistan Real 5th Gen European Inverter.**
- **Single Phase Inverter, Supports three phase when installed in Parallel**
- 100% Pure Sine Wave Solar Inverter
- Monitor & control with built-in Wi-Fi (10 meter range) & available for Android devices
- Inverter running with battery or without battery
- Energy generated record, load record, history information & fault record
- Built-in Battery equilizations / BMS (Battery Management System)
- Adaptable to main Voltage / generator power
- Conformal coating to prevent from dust and humidity
- New Smart Color Screen LCD with touch buttons
- Built-in anti dust for harsh environment
- Compatible with all kinds of Lithium Batteries (Multiple Parameters)
- Smart power management set multiple schedules
- Comunication ports Rs232/USB/RS485/CAN
- Zero transfer time
- **98% Real time sharing**
- **Overload Protection on 150% Load**
- **Surge Capacity 2* Rated Power for 5 Seconds**
- **Parallel upto 12 Units**
- **Built-in Dual MPPT parallel based 8500W solar charge controller (160A)**
- **High PV input voltage range (120~500 VDC)**
- **12VDC Output 32A**
- **Dual AC Output**
- **Maximum PV input current 36A**
- **Multiple operation modes (On Grid / Of Grid / Hybrid)**
- **Grid-Tied net metering feature with 100% reverse grid feeding**
- **Builtin Zero export**
- **European Designed**

5 YEAR WARRANTY*

*Terms & Condition Applies



Wi-Fi Dongle

Wi-Fi App

Certification

MARVEL SERIES

Powered by **GROWATT PK**

MARVEL
SERIES

PRODUCT DATA SHEET

MODELS	MARVEL 5G EUROPEAN PV 8500
Rated Power	**7000VA / 6500W**
INPUT	
Voltage	230VAC
Selectable Voltage Range	90-280VAC (For Home Appliances) / 170-280VAC (For Computer)
Frequency Range	50Hz/60Hz (Auto Sensing)
OUTPUT (OFF GRID OPERATION)	
AC Voltage Regulation (Batt.Mode)	230VAC±10%
Overload (Line mode)	5a @>150% load; 10s @110%-150% load; 100ms @>200% Load
Efficiency(Peak)	**98%**
Transfer Time	10ms (For Personal Computers); 20ms (For Home Appliances)
Wave form	Pure Sine Wave
OUTPUT (GRID-TIE OPERATION)	
Nominal Output Voltage	220/230/240 VAC
Output Voltage Range	184-264.5 VAC or 195.5 - 253 VAC (Selectable)
Nominal Output Current	**29.54A**
BATTERY	
Battery Voltage	48VDC
Floating Charge Voltage	54VDC
Overcharge Protection	63VDC
SOLAR CHARGER & AC CHARGER	
Solar Charger Type	**DUAL MPPT (PARALLEL)**
Maximum PV Array Open Circuit Voltage	500VDC
Maximum PV Array Power	**8500W 98%**
MPPT Range @ Operating Voltage	120~450 VDC
Maximum Solar Charge Current	80A + 80A = 160A
Maximum PV Input Current	**36A**
Nominal PV Voltage	**240 VDC**
Maximum AC Charge Current	**60A**
PHYSICAL	
Dimension.D*W*H(mm)	**224 x 535 x 425 mm**
Net Weight (kgs)	**13.5 KG**
Communication Interface	USB and Rs232
OPERATING ENVIRONMENT	
Humidity	0 to 90% Relative Humidity (Non-condensing)
Operating Temperature	-10°C to 50°C
Storage Temperature	-15°C to 60°C

Note: Product specifications are subject to change without further notice



ZIEWNIC® Solar Energy

*1 Year Manufacturing Fault Warranty & 4 Year Service Warranty



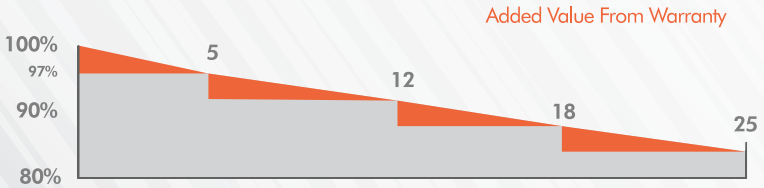
JSGFM-36-185

(5BB) VERTEC SERIES

MONOCRYSTALLINE SILICON SOLAR MODULE

KEY SALIENT FEATURES

- High output and efficiency even under low light conditions
- Salt mist corrosion tested, perfect for harsh climatic conditions
- Durable and reliable solar panel due to stringent quality control measures.
- Ziewnic is committed to innovation and constantly working to provide the next breakthrough in solar technology
- 0-3% power tolerance
- 20.0% Cell efficiency



Certification

5 Year Warranty

25 Linear Life

*Terms & Condition Applies

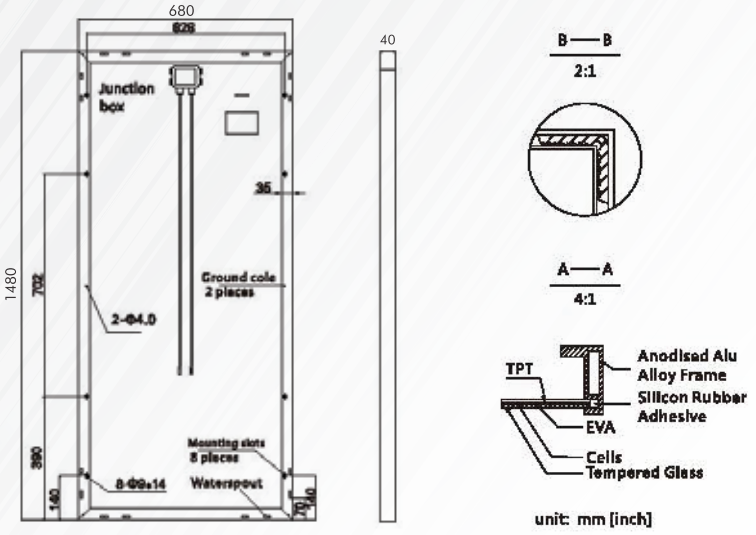
Vertec series

Powered by GROWATT PK

Vertec series

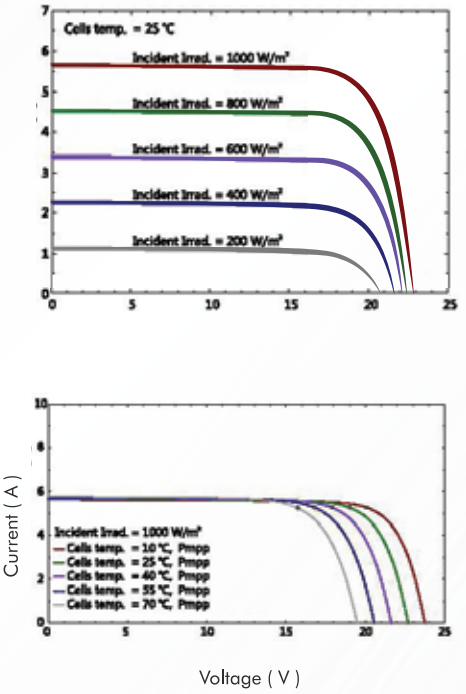
JSGFM - 36 - 185 (5BB)

MECHANICAL DRAWINGS



BACK VIEW SIDE VIEW

I-V CURVES



MECHANICAL SPECIFICATION

Front Cover (Material/Thickness	Low-Iron tempered glass / 3.2mm
Bodasheet (Color)	Black
Cell (Qty/Material/Dimensions)	36 / monocrystalline silicon / 156 x 156mm
Frame	anodized aluminium alloy / black
Junction Box (Protection Degree)	>IP65
Cables & Plug connections	900mm/4mm² & MC4 compatible / IP67
Module Dimensions (L/W/H)	1480mm x 680mm x 40mm
Module Weight	11 kg

PACKING CONFIGURATION

Container	40' HQ
Pieces Per Container	1630

ELECTRICAL CHARACTERSTICS

Module Type	JSGFM-36-185
Power Output	185w
Power Output tolerances	0~3
Voltage at Pmax	18.98v
Current at Pmax	9.42A
Open-circuit voltage	22.75v
Short-circuit current	9.79A

STC: 1000W/m2 irradiance, 25°C cell temperature, AM1.5.

SYSTEM INTEGRATION PARAMETERS

Max. system voltage	VDC 1000V
Limiting reverse current	20A
Operating temperature range	-40~+85°C
Max. static load front (e.g., snow)	5400Pa
Max. static load back (e.g., wind)	2400Pa
Max. hollstone impact (diameter/velocity)	25mm/ 23m/s

Note: Product specifications are subject to change without further notice

TEMPERATURE CHARACTERISTICS

Norminal Operating Cell Temperature(Noct)	45°C±2°C
Temperature Coefficient Of Pmax	-0.45%°C
Temperature Coefficient Of Voc	-0.34%°C
Temperature Coefficient Of Isc	0.06%°C
Temperature Coefficient Of Vmpp	-0.40%°C

ZIEWNIC® Solar Energy



JSGFM-144-435W
JSGFM-144-450W
JSGFM-144-480W

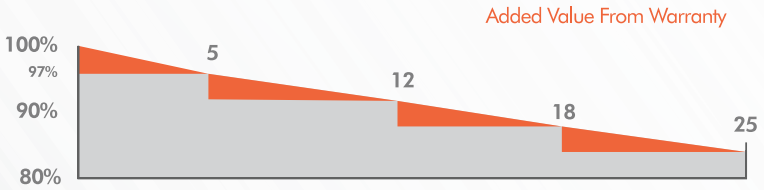
VERTEC SERIES

MULTI BUSBAR - HALF CUT MONO PERC



KEY SALIENT FEATURES

- High output power
- Better power generation under shadows
- Strong anti-hot spot ability
- Strong mechanical load capacity
- Super strong frame
- 1500V system voltage



Certification

10 Year Warranty

25 Linear Life

*Terms & Condition Applies

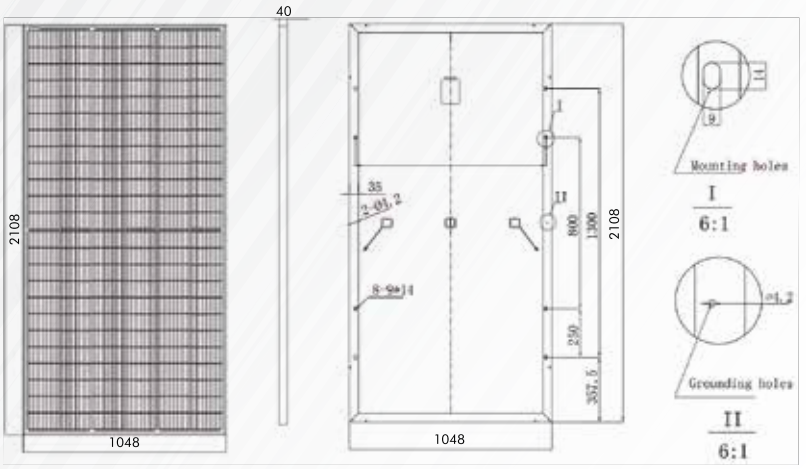
Vertec series

Powered by GROWATT PK

Vertec series

JSGFM-144-435W/450W/480W

MECHANICAL DRAWINGS

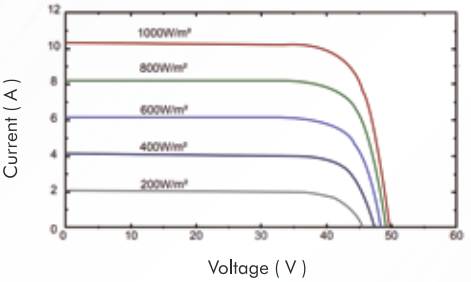


FRONT VIEW SIDE VIEW BACK VIEW

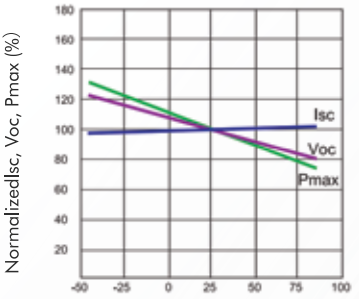
I-V CURVES

I-V Gurves at JSGFM 144-435W/450W/**480W** at different Irradiances

Cell Temp: 25°



Power voltage current curve at different temperature



MECHANICAL SPECIFICATION

Cell Type	Mono Crystalline 158.75x79.375mm
Number Of Cells	144 (6x24)
Dimensions(AxBxC)	2108x1048x40mm
Weights	25.5kg
Glass	3.2mm Tempered Low Iron Glass
Aluminium Frame	Anodised Aluminium
Junction Box	Split Junction Box (IP68 ,three diode)
Connector	Mc4 Compatible
Output Cables	4.0mm², +300mm,-300mm Customized Length

PACKING CONFIGURATION

Container	40' HQ
Pieces Per Container	**720**

ELECTRICAL CHARACTERSTICS

Module Type	435W	450W	480W
	STC	STC	STC
Maximum Power At STC (Pmax)	435W	450W	480W
Short Circuit Current (Isc)	10.32A	11.64A	11.8A
Open Circuit Voltage (Voc)	49.81V	49.7V	49.5V
Open Circuit Wattage (OCW)	480W	540W	580W
Maximum Power Current (Impp)	9.77A	10.15A	10.8A
Maximum Power Voltage (Vmpp)	41.46V	40.4V	44.5A
Module Efficiency	20.18%	20.98%	21.5%
Power Tolerance	0~+5W	0~+5W	0~+5W
Maximum System Voltage		VDC 1500V	
Maximum Series Fuse		20A	
Increased Snowload Acc.to Iec 61215		5400Pa	
Operating Temperature		-40~+85℃	
Number Of Bypass Diodes		3	
Norminal Operating Cell Temperature(Noct)		45℃~60℃	
Temperature Coefficient Of Pmax		-0.36%℃	
Temperature Coefficient Of Voc		-0.29%℃	
Temperature Coefficient Of Isc		0.05%℃	

STC: 1000W/m2 irradiance, 25°C cell temperature, AM1.5. NOCT: Irradiance at 800W/m² , Ambient Temperature 20°C , wind speed 1m/s .
Note: Product specifications are subject to change without further notice



ZIEWNIC® Solar Energy

Introducing 1st Time in Pakistan

640W

Panel in 210mm Cell Size with 21.2% + Efficiency



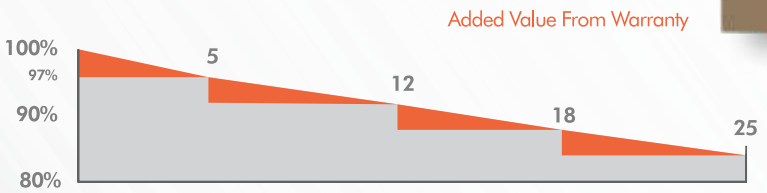
TS-M-640DE22
TS-M-600DE22

VERTEC SERIES

MULTI BUSBAR - HALF CUT MONO PERC

KEY SALIENT FEATURES

- Ultimate string power 37% higher string power
- Most efficient cost-saving
- High output power
- Better power generation under shadows
- Strong anti-hot spot ability
- Strong mechanical load capacity
- Super strong frame
- 1500V system voltage



Certification

10 Year Warranty

25 Linear Life

*Terms & Condition Applies

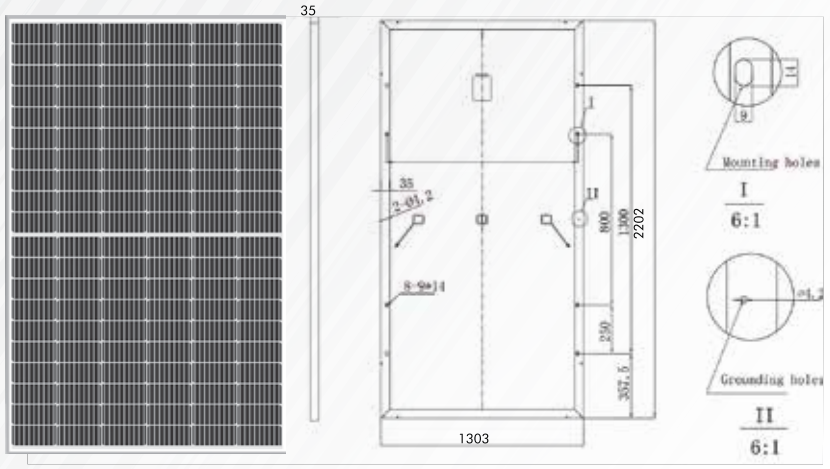
Vertec series

Powered by GROWATT PK

Vertec series

TS-M-600DE22 & TS-M-640DE22

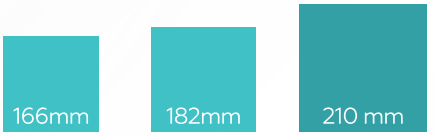
MECHANICAL DRAWINGS



FRONT VIEW SIDE VIEW BACK VIEW

210mm, The Future from Now On!

Vertec module with 600W+ power and 21.2%+ effciency





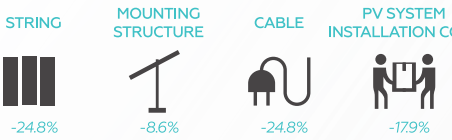
Multi-busbar technology, improving optical utilization rate with higher electricity performance.

Module power increase 2~3%, effciency increase 0.4~0.6%v



Conventional Module **VERTEC Module**

High density encapsulation technology, optimizing power output with good balance between reliability and effciency, module effciency increase 0.2~0.3%



MECHANICAL SPECIFICATION

Cell Type	Half Cut Mono Perc 210x105mm
Number Of Cells	120（6x20）
Dimensions(AxBxC)	2202x1302x35mm
Weights	30.9kg
Glass	3.2mm Tempered Low Iron Glass
Aluminium Frame	Anodised Aluminium
Junction Box	Split Junction Box (IP68 ,three diode)
Connector	Mc4 Compatible
Output Cables	4.0mm², +300mm,-300mm Customized Length

PACKING CONFIGURATION

Container	40' HQ
Pieces Per Container	565

ELECTRICAL CHARACTERSTICS

Module Type	600W	640W
	STC	STC
Maximum Power At STC (Pmax)	600w+/-3%	640w+/-3%
Short Circuit Current (Isc)	17.2A+/-4%	17.9A+/-4%
Open Circuit Voltage (Voc)	43.5V+/-3%	43.5V+/-3%
Maximum Power Current (Impp)	16.23A	16.9A
Maximum Power Voltage (Vmpp)	36.5V	
Module Efficiency	20.98%	
Power Tolerance	0~+5W	
Maximum System Voltage	IEC 1500V	
Maximum Series Fuse	30A	
Module Application	A Tier1	
Operating Temperature	-40~+85℃	
Number Of Bypass Diodes	2	
Temperature Coefficient Of Pmax	-0.36%℃	
Temperature Coefficient Of Voc	-0.29%℃	
Temperature Coefficient Of Isc	0.05%℃	

STC: 1000W/m2 irradiance, 25°C cell temperature, AM1.5. NOCT: Irradiance at 800W/m² , Ambient Temperature 20°C , wind speed 1m/s .
Note: Product specifications are subject to change without further notice



ZIEWNIC® Solar Energy



SUNTREE

ON GRID 3 PHASE STRING INVERTER

NET METERING BASED ON GRID INVERTERS

KEY SALIENT FEATURES

- Support 500W Plus Solar Panels
- Support double glass PV module multiple MPPT design,
- Maximum efficiency of 98.1 to 99.9%
- Big LCD screen, multi-function buttons, wide input voltage 250~1100VDC
- Diverse communication connection RS232, RS485, Wi-Fi and GPRS
- IP65 protection degree, natural cooling
- String level monitoring. efficient and quick fault diagnosis

5 YEAR WARRANTY*

*Terms & Condition Applies

Wi-Fi Plug Included



Anti-Reverse Power Controller - Optional

Solar JFY Android Application

Certification

Powered by **GROWATT PK**

SUNTREE SERIES

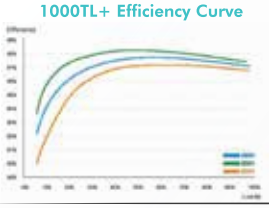
PRODUCT DATA SHEET

MODELS	10K TL+	20K TL+	30K TL+	50K TL+
INPUT (DC SIDE)				
Max. DC Input power (W)	12000	24000	36000	60000
Max. DC voltage (VDC)	1000	1000	1000	1100
Start voltage (VDC)	200	200	200	200
MPPT voltage range (VDC)	200~960	200~960	200~960	200~1000
Numbers of inputs	2	4	6	10
Numbers of MPPT	2	2	3	4
Max. Input current (A)	2*13	2*25	3*25	18/28/19/28
OUTPUT (AC SIDE)				
Rated output power (W)	10000	20000	30000	50000
Max. output power (VA)	12000	24000	36000	60000
Rated output current (A)	14.4	28.9	43.3	72.2
Max. output current (A)	15.8	31.8	47.6	79.4
Rated output voltage (VAC)	400	400	400	400
Output voltage range (VAC)*	323-480	323-480	323-480	323-480
Grid frequency range (HZ)*	50/60±5	50/60±5	50/60±5	50/60±5
Power factor (cos)	0.8 (Leading)	0.8 (Leading)	0.8 (Leading)	0.8 (Leading)
	0.8 (Lagging)	0.8 (Lagging)	0.8 (Lagging)	0.8 (Lagging)
THDI	<3%	<3%	<3%	<3%
EFFICIENCY				
Max. efficiency	98.1%	98.2%	98.2%	98.5%
Euro. efficiency	97.5%	97.6%	97.6%	98.1%
MPPT efficiency	99.8%	99.8%	99.9%	99.9%
PROTECTION				
Built-in protections	Dc Reverse Polarity, Short Circuit, Output Over Current, Output Over Voltage, Insulation Resistance Monitoring			
	Residual Current Detection, Surge Protection, Anti-island Protection, Over Temperature Protection			
Lighting protection	DC Type/AC Type			
GENERAL DATE				
Operating temperature (°C)	-25~+60	-25~+60	-25~+60	-25~+60
Noise [dB (A)]	≤30	≤30	≤30	≤60
Night power consumption (W)	<2	<2	<2	<2
Electrical isolation	Transformerless	Transformerless	Transformerless	Transformerless
Cooling concept	Natural Cooling	Natural Cooling	Natural Cooling	Forced Air Cooling
Degree of Protection	IP65	IP65	IP65	IP65
Communication:RS232/	Yes/Opt	Yes/Opt	Yes/Opt	Yes/Opt
RS485/Wi-Fi/GPRS	Opt/Opt	Opt/Opt	Opt/Opt	Opt/Opt/Opt
Dimensions (W*D*H mm)	355*190*450	410*210*528	476*258*830	545*270*782
Weight (kg)	18	28	42	58

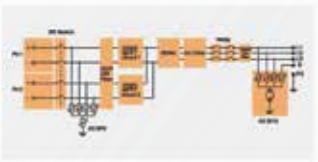
*AC grid voltage range and frequency depends on local standards.

Note: Product specifications are subject to change without further notice

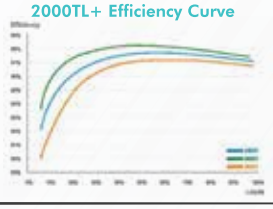
1000TL+ Efficiency Curve



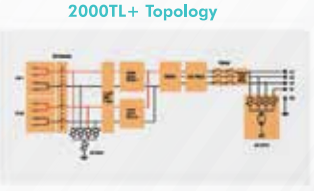
1000TL+ Topology



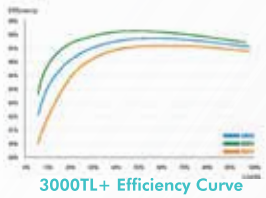
2000TL+ Efficiency Curve



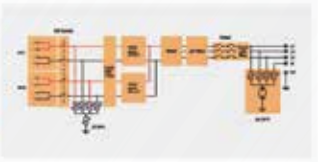
2000TL+ Topology



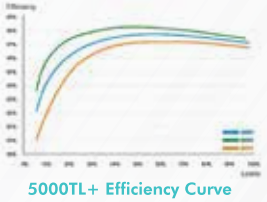
3000TL+ Efficiency Curve



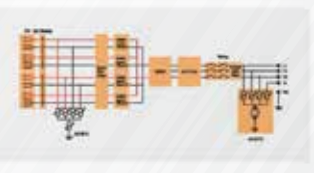
3000TL+ Topology



5000TL+ Efficiency Curve



5000TL+ Topology



ZIEWNIC® Solar Energy



3 PHASE ON GRID

Solar Inverter

SI-5K-T2 / SI-10K-T2 / SI-15K-T2 / SI-25K-T2 / SI-30K-T2

KEY SALIENT FEATURES

STABLE
The chassis adopts high protection design, prolong life time. performance well in extreme conditions.

SMART
One-button safety setting, easy configuration of all parameters. Built-in independence RTC chip data storage of 25 years

FLEXIBLE
Transformer-less, smaller and lighter. Optimized global MPPT algorithm, MPPT efficiency higher than 99.5%

RELIABLE
Key components are from first rank brand supplier worldwide. R & D team are experiences experts in string inverter circle, proven technology create reliable quality

SAFE
IP 65 protection for indoor and outdoor installation. AC and DC surge protection gurantee system safety

EASY USE
Integrated RS232/WIFI/GPRS, RS485 port, for improved communication. Free monitoring anytime anywhere. Local and remote intelligent maintenance by PC and Apps.

Wireless Communication Module (WIFI/GPRS)



Wi-Fi Dongle

General Specification

Rated Voltage	DC4.7V-15V
Max. Current	500mA(DC 5V)
Operation Environment Temperature	-35°C~+80°C
IP Class	IP 65
External Interface	Db9, used for communicatoon & Power Supply
Dimension (W/L/H) in mm	31/73/132
Weight	35g

Communication Specification

Local Commucincation Interface	RS485/Rs232
Public Network Access Mode	WIFI/GPRS

10 YEAR WARRANTY*

*Terms & Condition Applies

Made in Germany

Powered by GROWATT PK

3 PHASE ON GRID

Solar Inverter

PRODUCT DATA SHEET

MODELS	SI-5K-T2	SI-10K-T2	SI-15K-T2	SI-25K-T2	SI-30K-T2
Input Data					
Max. DC input power	7000W	15000W	21000W	35000W	42000W
Max. DC input voltage			1100V		
Operation voltage range			200V-1000V		
Number of independent MPPT / strings per MPPT	2/1	2/1	2/1+2	2/2+2	2/2+3
MPPT max. current	18A/18A	18A/18A	18A/30A	30A/30A	30A/46A
AC Output Data					
Rated output power	5000W	10000W	15000W	25000W	30000W
Max. output power	5500W	11000W	16500W	27500W	33000W
Rated output voltage			400V/320V480V		
Rated output frequency			50Hz,60Hz/±5Hz		
Rated output current	7.2A	14.5A	22A	36A	43.5A
Max, output current	8A	16A	24A	40A	48A
Power factor			-0.8~+0,8(adjustable)		
THDI			3%(Nominal Ouut)		
Grid system pattem			3W+N+PE		
Efficiency					
Max. efficiency	98.2%	98.2%	98.5%	98.5%	98.5%
Europe efficiency	98%	98%	98.2%	98.2%	98.2%
Protection					
Input DC switch			Yes		
Input over curent protection			Yes		
DC reverse polarity protection			Yes		
Output over voltage protection			Yes		
Output over current protection			Yes		
Anti islanding protection			Yes		
AC surge protection			Yes		
DC surge protection			Yes		
Insulation impedance protection			Yes		
RCD detection			Yes		
General Data					
Dimensions(W/L/H) in mm	403/360/192	403/360/192	403/360/238	403/360/238	403/360/238
Weight	15kg	15kg	15kg	20.5kg	22kg
Noise			<30dB		
Operation temperature range			-25℃~+60℃		
Heat dissipation mode	Natural	Natural	Smart Cooling	Smart Cooling	Smart Cooling
IP Class			IP65		
Maximum altitude			4000m		
Self-Consumption night			<1w		
Topology			Transformerless		
Features					
LCD display			Yes		
Communication interface			WIFI/GPRS/RS485 (Optional)		
Warranty			10 years* (5 years product & 5 year service)		
Standards			IEC62109-1, IEC62109-2, NB/T32004, VDE-AR-N4105, EN5O549, AS 4777		

*5 Years Product Warranty & 5 Years Service Warranty

Note: Product specifications are subject to change without further notice

ZIEWNIC® Solar Energy



3 PHASE ON GRID

Solar Inverter

SI-50K-T2 / SI-60K-T2 / SI-80K-T2

KEY SALIENT FEATURES

STABLE
The chassis adopts high protection design, prolong life time. performance well in extreme conditions.

SMART
One-button safety setting, easy configuration of all parameters. Built-in independence RTC chip data storage of 25 years

FLEXIBLE
Transformer-less, smaller and lighter. Optimized global MPPT algorithm, MPPT efficiency higher than 99.5%

RELIABLE
Key components are from first rank brand supplier worldwide. R & D team are experiences experts in string inverter circle, proven technology create reliable quality

SAFE
IP 65 protection for indoor and outdoor installation. AC and DC surge protection gurantee system safety

EASY USE
Integrated RS232/WIFI/GPRS, RS485 port, for improved communication. Free monitoring anytime anywhere. Local and remote intelligent maintenance by PC and Apps.

Wireless Communication Module (WIFI/GPRS)



Wi-Fi Dongle

General Specification

Rated Voltage	DC4.7V-15V
Max. Current	500mA(DC 5V)
Operation Environment Temperature	-35℃~+80℃
IP Class	IP 65
External Interface	Db9, used for communicatoon & Power Supply
Dimension (W/L/H) in mm	31/73/132
Weight	35g

Communication Specification

Local Commucincation Interface	RS485/Rs232
Public Network Access Mode	WIFI/GPRS

10 YEAR WARRANTY*

*Terms & Condition Applies

Made in Germany

Powered by GROWATT PK

3 PHASE ON GRID

Solar Inverter

PRODUCT DATA SHEET

MODELS	SI-50K	SI-60K	SI-80K
Input Data			
Max. DC input power	65000W	80000W	110000W
Max. DC input voltage		1100V	
Operation voltage range		200V-1000V	
Number of independent MPPT / strings per MPPT	3/3	3/4	4/4
MPPT max. current	40A*3	52A*3	52A*4
AC Output Data			
Rated output power	50000W	60000W	80000W
Max. output power	55000W	66000W	88000W
Rated output voltage		400V/320V480V	
Rated output frequency		50Hz,60Hz/±5Hz	
Rated output current	72A	87A	115A
Max, output current	80A	95A	128A
Power factor		-0.8~+0,8(adjustable)	
THDI		3%(Nominal Ouut)	
Grid system pattem		3W+N+PE	
Efficiency			
Max. efficiency		99%	
Europe efficiency		98.5%	
Protection			
Input DC switch		Yes	
Input over curent protection		Yes	
DC reverse polarity protection		Yes	
Output over voltage protection		Yes	
Output over current protection		Yes	
Anti islanding protection		Yes	
AC surge protection		Yes	
DC surge protection		Yes	
Insulation impedance protection		Yes	
RCD detection		Yes	
General Data			
Dimensions(W/L/H) in mm		403/360/238	
Weight	55kg	55kg	68kg
Noise		<30dB	
Operation temperature range		-25℃~+60℃	
Heat dissipation mode		Smart Cooling	
IP Class		IP65	
Maximum altitude		4000m	
Self-Consumption night		<1w	
Topology		Transformerless	
Features			
LCD display		Yes	
Communication interface		WIFI/GPRS/RS485 (Optional)	
Warranty		10 years* (5 years product & 5 year service)	
Standards		IEC62109-1, IEC62109-2, NB/T32004, VDE-AR-N4105, EN5O549, AS 4777	

*5 Years Product Warranty & 5 Years Service Warranty

Note: Product specifications are subject to change without further notice

ZIEWNIC® Solar Energy

Lithium Battery



Li-WALL
24V220AH/48V120AH
LITHIUM BATTERY POWER BANK

KEY SALIENT FEATURES

- Introducing 1st time in Pakistan, wall mounted lithium battery along with large LCD display
- 24V, 48V LiFePO4 pack, superior safety and reliability.
- Top brand cell such as CATL, BYD or GOTION.
- More than 3000 times charge/discharge cycle life.
- Long lifespan: 5 years warranty, 10+ years life design.
- With intelligent BMS system to optimize the performance.
- Built in intelligent **BMS** management system
- Built in 1.2A cell equalizer, can balance all cells in short time.
- Charge & discharge current is up to Maximum 200A and the cold start impulse current is 1000A.
- Excellent standby self-consumption as low as 4mA.
- High density, small size and weight.
- Wall mounted design, easy installation.
- All around protection and unattended operation.
- Optional for LCD display or communication (CAN/RS485/RS232).
- Application for off-grid/hybrid/solar system/UPS/Inverter/Storage power system
- Excellent standby self-consumption as low as 4MA. Automatically output cut off after 30 days no-charge & discharge to ensure security (also can cut off output by manual operation).
- Load capacity 24V220AH (5632WH). 48V120AH (6144WH) Battery bank.
- Over Charge Protection, Over Discharge Protection, Over Current Protection, Short Circuit Protection, Over Temperature Protection
- Commercially approved fire certificate UN38.3 & other safety standard IEC62619, MSDS & CE

60 MONTHS WARRANTY*

*Terms & Condition Applies

Certification

CE UN38.3 MSDS IECEE CB SCHEME IEC

LiFePO4

Powered by **GROWATT PK**

MODELS	Li-WALL 24V220AH	Li-WALL 48V120AH
Battery Type	LiFePO4	
Normal Battery Voltage (VDC)	25.6V	51.2V
Normal Cpacity (25C, 0.2C) (WH)	5632WH	6144WH
Voltage Window (VDC)	22.4~29.2V	44.8~58.4V
Folar Charge Voltage (VDC)	27.6V	55.2V
Max. Continue Discharge Current (A)	150	100
Max. Pulse Discharge Current (A)	200A 30Sec.	200A 30 Sec.
Max. Continue Charge Current (A)	100	50
Case Design	Powerwall Design	
Cycle Life (+25C 0.2 80%DOD)	>3000 Cycles (Optional for >5000 Cycles with 5 Years Warranty)	
Cell Equalizer Current (A)	1~5A Max	
Terminal	M8	
Storage Temperature	0°C~30°C	
Storage Duration	6 months at 25°C	
Safety Standard	UN38.3, IEC62619, MSDS,CE	
IP Degree	IP20	
PROTECTION		
Protection	Over Charge Protection,over Discharge Protection, Over Current Protection, Short Circuit Protection, Over Temperature Protection	
AMNIENT		
Noise (dB)	<40dB (1 Meter)	
Working Temperature	-10°C~+50°C	
Humidity	0~95% (no condensation)	
Sea Level (m)	-1500	
DIMENSION		
LxWxH (Product Size) mm	L550*W375*H227	L520*W480*H200
LxWxH (Product Size) mm	L668*W666*H255	L590*W550*H240
Weight (NW Kg)	73.0Kg	44.0Kg
Weight (GW Kg)	74.0Kg	45.0Kg

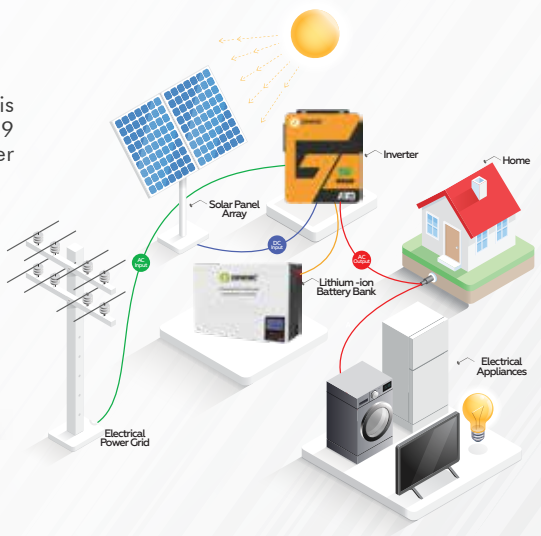
Note: Product specifications are subject to change without further notice

Why need battery storage system?

High-efficiency for your power distribution cut & save your electricity bills

Electricity power occupies more than half of increasing energy consumption in this decade DER (ditributed energy resources) is crucial today during the COVID-19 panedemic while the conventional grid is less reliable because of the less manpower available.





Realize your grid Independence
Keep your grid available during terrible whether or extreme situations.

*5 Year warranty at 25°c cells over charge and swol or burn no claim

ZIEWNIC® Solar Energy

Introducing 1st Tubewell Pumping Inverter with

MPPT
Charger Controller



GD 100 PV
MPPT BASED

TUBEWELL PUMPING INVERTER

PRODUCT DATA SHEET

MODEL	Rated Output Power KW	Rated Input Current	Rated Output Current	Rated Motor HP	DC Input	Output Voltage	MPPT Solar Capacity
GD100-004G-4-PV	4.0	13.5	9.5	4 to 5	250-800V	380-440V	5 KW
GD100-5R5G-4-PV	5.5	19.5	14	5.5 to 7.5	250-800V	380-440V	7.5 KW
GD100-7R5G-4-PV	7.5	25	18.5	7.5 to 10	250-800V	380-440V	11 KW
GD100-011G-4-PV	11	32	25	10 to 15	250-800V	380-440V	15 KW
GD100-015G-4-PV	15	40	32	15 to 18	250-800V	380-440V	18 KW
GD100-018G-4-PV	18.5	47	38	18 to 20	250-800V	380-440V	22 KW
GD100-022G-4-PV	22	55	45	25 to 30	250-800V	380-440V	25 KW
GD100-030G-4-PV	30	70	60	30 to 37	250-800V	380-440V	30 KW
GD100-037G-4-PV	37	80	75	37 to 40	250-800V	380-440V	37 KW

Certification

High Efficiency

DSP Chip

Plug n Play
No Need Parameter

MPPT Solar
Charge Controller

1 Year Warranty

*Terms & Condition Applies



CHF 100A

VFD Inverters

SINGLE & THREE PHASE INVERTERS

PRODUCT DATA SHEET

MODEL	Rated Output Power KW	Rated Current A	Rated Motor HP	DC Input	Output Voltage
CHF100A-1R5G-2	1.5	7	2	250~400	220
CHF100A-2R2G-2	2.2	10	3	250~400	220
CHF100A-004G-2	4	16	5	250~400	220
CHF100A-2R2G-4	2.2	5	3	250~400	380
CHF100A-004Z-4	4	9	5	400~800	380
CHF100A-5R5G-4	5.5	13	7.5	400~800	380
CHF100A-7R5G-4	7.5	17	11	400~800	380
CHF100A-011G-4	11	25	15	400~800	380
CHF100A-015G-4	15	32	18	400~800	380
CHF100A-018G-4	18	37	20	400~800	380
CHF100A-022G-4	22	45	25	400~800	380
CHF100A-030G-4	30	60	40	400~800	380
CHF100A-037G-4	37	75	45	400~800	380
CHF100A-045G-4	45	90	50	400~800	380
CHF100A-055G-4	55	110	60	400~800	380
CHF100A-075G-4	75	150	82	400~800	380
CHF100A-090G-4	90	176	110	400~800	380
CHF100A-0110G-4	110	210	160	400~800	380

Certification

1 Year Warranty

*Terms & Condition Applies

ZIEWNIC® Solar Energy

CERTIFICATION













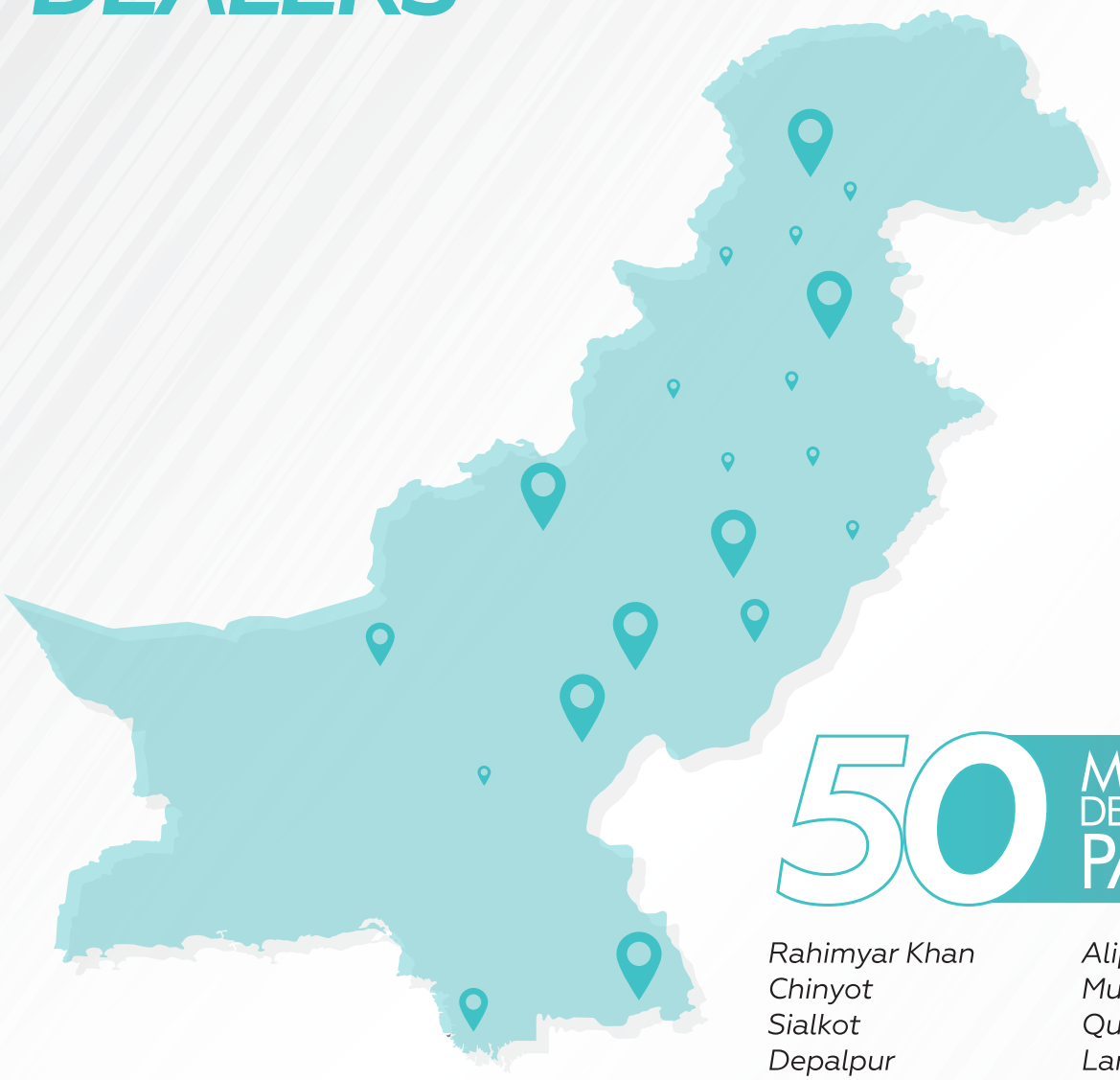








DEALERS



50 MORE THAN DEALERS ACROSS PAKISTAN

Rahimyar Khan
Chinyot
Sialkot
Depalpur
Faisalabad
Lucky Marwat
Fatepur
Bannu
Sawabi
Rawalpindi
Chakwal
Jehlum
Sarghoda
Lahore
Sheikhupura
Dera Ghazi Khan
Vehari
Bahawalpur
Farooqabad
Kasur
Multan
Sadiqabad
Alipur
Muzafargarh
Quetta
Larkana
Gawadar
Nawabshah
Karachi
Hyderabad
Sukkur
Sibi
Mardan
Swat
Qamar Garha
Sawabi
Dera Ismail Khan
Charsada
Peshawar
Khushab
Pir Mahal
Phalia
Mcleod Ganj
Karak

GALLERY



PRODUCTION LINE




ZIEWNIC®
Solar Energy



GROWATT PK (Pvt.) Ltd.

Office # 5, 2nd floor, Above Meezan Bank, Rehman Mansion, Sharah-e-Liaquat, Saddar, Karachi.

/growattpk